

ABSTRACT OF THE DISCLOSURE

5 The present invention provides methods of treating cancers, chemoprevention,
selectively inducing terminal differentiation, cell growth arrest and/or apoptosis of
neoplastic cells, and/or inhibiting histone deacetylase (HDAC) by administration of
pharmaceutical compositions comprising potent HDAC inhibitors. The oral
bioavailability of the active compounds in the pharmaceutical compositions of the present
invention is surprisingly high. Moreover, the pharmaceutical compositions unexpectedly
10 give rise to high, therapeutically effective blood levels of the active compounds over an
extended period of time. The present invention further provides a safe, daily dosing
regimen of these pharmaceutical compositions, which is easy to follow, and which results
in a therapeutically effective amount of the HDAC inhibitors *in vivo*.